

**SUBMISSION AGREEMENT  
BETWEEN  
THE NOAA CENTER FO OPERATIONAL OCEANOGRAPHIC PRODUCTS AND  
SERVICES  
AND  
THE NATIONAL CENTERS FOR ENVIRONMENTAL INFORMATION  
FOR HARMFUL ALGAL BLOOM OPERATIONAL FORECAST SYSTEM**

**2017-02-08**

**Introduction**

This document represents the agreement that the NOAA Center fo Operational Oceanographic Products and Services (NOAA>NOS>CO-OPS) (the "Provider") and the National Centers for Environmental Information (NCEI) (the "Archive") have reached for submitting the Provider's data, Harmful Algal Bloom Operational Forecast System, to the Archive for long-term preservation. It represents a joint effort between the Provider and the Archive to accurately document the agreement and the expectations between the two groups.

In order to ensure that the quality and integrity of the archived data is not compromised, the Provider and the Archive agree to maintain this agreement with accurate and up-to-date information through the life of the data submission.

Add comments as needed

**Contacts**

Persons included in all communications regarding the data submission.

**Provider Contacts**

Point of Contact, Product Coordinator

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NOS/CO-OPS

HAB-OFS Product Coordinator

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**Archive Contacts**

Data Acquisition, Science steward

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Centers for Environmental Information,

NESDIS, NOAA, U.S. Department of

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**Data Overview**

CO-OPS issues operational bulletins in pdf and georeferenced pdf formats that contain an analysis of ocean color satellite imagery, field observations, models, public health reports and buoy data and forecasts of potential harmful algal bloom (HAB) transport, intensification and associated respiratory irritation based on the analysis of information from data providers. The bulletins are issued twice weekly during an active HAB and once weekly during a non-HAB period to a list of subscribers. The bulletins help federal, state and local coastal resource managers; public health officials and research scientists coordinate HAB response efforts to minimize impacts.

Outputs: PDF or Georeferenced PDF operational bulletins; satellite imagery products processed and/or edited by the HAB-OFS for HAB detection (hdf4 and geotiff)

Coverage: eastern and western Gulf of Mexico and the Atlantic coast of Florida

## Applicable and Reference Documents

Documents applicable to or referenced from this agreement.

1. User guide: [https://tidesandcurrents.noaa.gov/hab/hab\\_publication/habfs\\_bulletin\\_guide.pdf](https://tidesandcurrents.noaa.gov/hab/hab_publication/habfs_bulletin_guide.pdf)

## Submission Scope

### Active Submission Period

2016-12-01 - 2017-12-31

### Data Types

Below is a summary of the data sizing and submission schedule by data type group. Enter information on at least one data type.

Data Type Name	Data Sizing	Submission Schedule
HAB Forecast Bulletins	2000+ files, 0.8 MB/file, ~1.6 GB total	20161201
Imagery Products	~2500 files, ~25GB total (rough estimate)	20161201

## Reviews and Testing

Describe the reviewing and testing procedures done by the Archive for the Provider's data, transfer interface, etc., prior to the data submission.

## Providing System

Identification of the system providing the data to NCEI.

System Name: HAB Production Server  
System Owner: DOC/NOAA/NOS/CO-OPS > Center for Operational Oceanographic Products and Services, National Ocean Service, NOAA, U.S. Department of Commerce  
Physical Location: SSMC4, Silver Spring, MD  
Additional Information: Add comments as needed on applicable data types, etc.

## Transfer Interface

Transfer from originator's Web server via https.

## Submission File Inventory

Information on each submitted file type from the Provider. Information on multiple file types can be added below.

**File Type Name:** HAB Forecast Bulletins

**File Name Pattern:**

HABYYYYMMDD\_YYYY###\_region.pdf

**File Name Field Definitions:**

YYYY=issue year, MM=issue month, DD=issue day, ###=bulletin number in issue year, region=bulletin region as follows SFL=south Florida, NWFL=northwest Florida, EFL=east Florida, TX=Texas)

**Example File Name:**

HAB20161013\_2016068\_SFL.pdf

**File Format:** PDF

**File Compression:** gzip

**File Size Average:** 850KB

**File Count (Rate):** Total file count and/or the file count rate at which this file will be submitted

**Data Volume (Rate):** Total data volume and/or the data volume rate at which this file will be submitted

**Submission Schedule:** General time window for when this file will be submitted

**Additional Information:** Avg file size given above as uncompressed.

**Descriptive Information Attributes:**

None: date/time fields are usually used as descriptive attributes for this file.

**File Type Name:** Edited Imagery Products

**File Name Pattern:**

GM\_chlor.MERCW\_MYYYYYJJJ\_Cimg#\_HHmmss\_E61\_MYYYYYJJJ.tif

**File Name Field Definitions:**

YYYYYJJJ = year and Julian Date;

img# = number of images in composite

HHmmss = timestamp of each image in composite (repeated img# times)

**Example File Name:**

GM\_chlor.MERCW\_M2011020\_C2\_153544\_171557\_E61\_M2010305305.zip

**File Format:** GeoTIFF

**File Compression:** gzip

**File Size Average:** 800KB

**File Count (Rate):** Total file count and/or the file count rate at which this file will be submitted

**Data Volume (Rate):** Total data volume and/or the data volume rate at which this file will be submitted

**Submission Schedule:** General time window for when this file will be submitted

**Additional Information:** Add comments as needed for this file type

**Descriptive Information Attributes:**

Attribute	Source	Use
Name of attribute	Source of attribute value, e.g., file name	For search, results display, and/or cross-referencing

## Submission Manifest

A submission manifest file with a 32-character MD5 checksum value is required for each submitted file in order to ensure the integrity of the submitted data.

### File Content Specification:

A submission manifest file contains a tab-delimited list of submitted file names and associated checksums for one or more submitted files.

### File Transmission:

Submission manifests will be accessible at the following URLs:

<https://hab.nos.noaa.gov/hab/archive/bulletins/> - for HAB Bulletins, and

<https://hab.nos.noaa.gov/hab/archive/anomaly/> - for image files

### File Name Pattern:

manifest\_bulletins.txt and manifest\_anomaly.txt for the bulletins and imagery, respectively

### File Name Definitions:

checksum value file\_url

### Example File Name:

[https://hab.nos.noaa.gov/hab/archive/bulletins/manifest\\_bulletins.txt](https://hab.nos.noaa.gov/hab/archive/bulletins/manifest_bulletins.txt)

## Archive Ingest

Ingest processing steps at the Archive and communication with the Provider.

### **Receipt Verification:**

The Archive will use the provided file name and 32-character MD5 checksum value to verify the integrity of a delivered file.

### **Error Reconciliation:**

The Archive will report any problems or errors with file integrity, file name, checksum validation, or other errors that inhibit the data ingest and archive to the Provider. A new corresponding submission manifest will be required for files re-submitted by the Provider.

### **Receipt Confirmation:**

The Archive will provide an inventory of the data ingested once it is completed or as requested by the Provider.

### **Quality Assurance:**

No quality checks on the submitted data are planned.

### **Archive File Packaging:**

Description of file packaging or re-naming by the Archive upon ingest.

## **Archive Storage**

Archive attributes of each archived file type.

**Archive File Type Name:** multiple\_file\_types

**Archive File Attributes/IDs:**

Attribute/ID Type	Value
N/A	N/A

## **Archive Updates**

New data files will accumulate on the originator's Web server throughout the year. Once a year the originator will prepare comprehensive manifest files and notify NCEI. NCEI will harvest the manifests and associated data files once annually.

## **Retention Schedule**

The data will be retained in the Archive for long-term preservation in accordance with NOAA data management standards. Information on data usage and archive value may be used for making decisions on continuing the duration of the archive.

(Notional) Disposition: 2091-12

## **Constraints**

No constraints apply or will apply to the archived data.

## **User Community**

Archived HAB operational bulletins will fortify NOAA's liability responsibilities. For instance, the archived product will enable NOAA to better meet requests for information on past HABs and their impacts on tourism and related businesses.

Archived HAB operational bulletins and satellite imagery products processed and/or edited by the HAB-OFS will support the research of scientists studying historical blooms. Access to the satellite imagery products will also help drive research improvements to the algorithms that may be transitioned to operations.

## **User Documentation and Metadata**

The Provider will supply information to the Archive for writing and maintaining standard archive metadata, which includes data discovery information, references and data archive access links for users. The following published documents and archived items will be referenced from the metadata and made available to users.

User guide: [https://tidesandcurrents.noaa.gov/hab/hab\\_publication/habfs\\_bulletin\\_guide.pdf](https://tidesandcurrents.noaa.gov/hab/hab_publication/habfs_bulletin_guide.pdf)

## **Representation Information Items**

For data to be useful to users, present and future, its format specification and characteristics must be documented and preserved with the data. Representation Information provides users with syntax (structure) and/or semantics (meaning) to decode the encoded data.

Item	Description
Item name or citation	Item description or intended use

## **Preservation Descriptive Information Items**

Preservation Descriptive Information items contain context, provenance, and/or quality information for the data.

Item	Description
Item name or citation	Item description or intended use

## **Access and Dissemination**

The Archive will provide access services for the data and supporting information to the designated user community.

## **Additional Terms**

None.